

Abstract

It is possible to match a parts model with a two-dimensional drawing. A parts model has shape changing elements whose shapes are changed before and after assembling and other common elements. Three-dimensional shape data on the shapes of the shape changing elements before assembling and their shapes after assembling and the shapes of the common elements are stored as three-dimensional shape data on the parts model in a database 12. A calculation unit 14 sets a restriction condition to become a single part between the shapes of the shape changing elements before assembling and the shapes of the common elements for the three-dimensional shape data stored in the database 12 and sets a restriction condition to become a single part between the shapes of the shape changing elements after assembling and the shapes of the common elements, so that three-dimensional shape data is spread into the two-dimensional drawing according to the restriction condition and displayed on the screen of the display unit 16.